CONTENTS

No. 1 JANUARY, 1944

J. M. McINTIRE, B. S. SCHWEIGERT AND C. A. ELVEJEM. The nutrition of the cotton rat (Sigmondon hispidus hispidus). One figure 1

ROBERT C. LEWIS, JR., FRANCES S. McKEE AND BERNARD C. LONGWELL. The effect of excessive dietary sodium and potassium on the carbohydrate metabolism of normal rats. Two figures 11

C. E. POLING, H. W. SCHULTZ AND H. E. ROBINSON. The retention of the nutritive quality of beef and pork muscle proteins during dehydration, canning, roasting, and frying 23

B. F. BARRENTINE, L. A. MAYNARD AND J. K. LOOSLI. The availability of the calcium and phosphorus of defluorinated rock phosphate for the rat. Two figures 35

RUTH M. LEVERTON AND EMILY S. BINKLEY. The copper metabolism and requirement of young women. One figure 43

LEMUEL D. WRIGHT AND ARNOLD D. WELCH. Folic acid, biotin and pantothenic acid deficiency and the liver storage of various vitamins in rats fed succinylsulfathiazole in highly purified rations 55

M. PIJOAN AND C. A. ELKIN. Secondary anemia due to prolonged and exclusive milk feeding among Shoshone Indian infants. One figure 67

MARY L. DODDS AND FLORENCE L. MacLEOD. WITH THE COOPERATION OF VIRGINIA COKER, HARVYE LEWIS, IMO H. SANSOM, SARAH STEPHENS, NELL WALL AND MARY J. WRIGHT. Blood plasma ascorbic acid values resulting from normally encountered intakes of this vitamin and indicated human requirements. Two figures 77

M. L. TAINTER, Actions of benzedrine and propadrine in the control of obesity. One figure. 89

HARRY J. DEUEL, JR., ELI MOVITT, LOIS F. HALLMAN AND FRED MATTSON. WITH THE TECHNICAL ASSISTANCE OF EVELYN BROWN. Studies of the comparative nutritive value of fats. I. Growth rate and efficiency of conversion of various diets to tissue. Five figures 107

No. 2 FEBRUARY, 1944

MAURICE SULLIVAN AND VIRGINIA J. EVANS. Nutritional dermatoses in the rat. IX. Evaluation of the interrelationship of magnesium deficiency and deficiencies of the vitamin B complex. One plate (eleven figures) .. 123

D. M. HEGSTED, J. M. McKIBBIN AND F. J. STARE. Nutrition and tolerance to atabrine 141

D. M. HEGSTED, J. M. McKIBBIN AND F. J. STARE. The effect of atabrine on choline deficiency in the young rat. One figure 149

C. C. Clayton and C. A. Baumann. Vitamin A storage and factors that affect the liver. One figure 155

Ancel Keys, Austin F. Henschel, Olaf Mickelsen, Josef M. Brozek and J. H. Crawford. Physiological and biochemical functions in normal young men on a diet restricted in riboflavin 165

Richard H. Barnes, Margaret F. Primrose and George O. Burr. The influence of the protein content of the diet upon fat digestibility 179

Jet C. Winters and Ruth E. Leslie. With the technical assistance of Catherine Donnell. A study of the diet of twenty women in a moderate income group 185

Henrik Dam. Studies on vitamin E deficiency in chicks. Five figures 193

No. 3 MARCH, 1944

John W. Hamilton and Albert G. Hogan. Nutritional requirements of the Syrian hamster 213

Gladys J. Everson, Harry Steenbock, Dena C. Cederquist and Helen T. Parsons. The effect of germination, the stage of maturity, and the variety upon the nutritive value of soybean protein 225

George H. Berryman and Paul E. Howe. A short method of calculating the nutritive value of diets (concluded) 231

Harold T. Edwards, Edward H. Bensley, David B. Dill and Thorne M. Carpenter. Human respiratory quotients in relation to alveolar carbon dioxide and blood lactic acid after ingestion of glucose, fructose, or galactose 241

N. R. Ellis and L. L. Madsen. The thiamine requirement of pigs as related to the fat content of the diet. Two figures 253

H. J. Almquist and C. R. Grau. Interrelation of methionine, choline, betaine and arsenocholine in the chick 263

Emma D. Kyhos, Edgar S. Gordon, Marian S. Kimble and Elmer L. Sevringhaus. The minimum ascorbic acid need of adults. Five figures. 271

No. 4 APRIL, 1944

John Haldi, George Bachmann, Charles Ensor and Winfrey Wynn. The effects on respiratory metabolism produced by equal amounts of caffeine in the form of coffee, tea and the pure alkaloid. One figure 287

E. L. Batchelder and Jane C. Ebbs. Some observations of dark adaptation in man and their bearing on the problem of human requirement for vitamin A. One figure 295

H. M. Hines, B. Lazere, J. D. Thomson and C. H. Cretzmeyer. A study of neuromuscular regeneration under different levels of vitamin C intakes 303

George H. Berryman, Cyrus E. French, Harold A. Harper and Herbert Pollack. Response to the intravenous injection of ascorbic acid as indicated by the urinary excretion of the total and reduced forms 309

MARY L. DODDS AND FLORENCE L. MACLEOD. A survey of the ascorbic acid status of college students. One figure 315

E. C. MILLER AND C. A. BAUMANN. The maintenance of adult rats on diets low in certain B vitamins 319

JACK M. COOPERMAN AND C. A. ELVEHJEM. The B vitamin content of groats and rolled oats 329

HARRY J. DEUEL, JR., LOIS F. HALLMAN, ELI MOVITT, FRED H. MATTSON AND ESTHER WU. Studies of the comparative nutritive value of fats. II. The comparative composition of rats fed different diets 335

HARRY J. DEUEL, JR. AND ELI MOVITT. With the technical assistance of Evelyn Brown. Studies of the comparative nutritive value of fats. III. The effect of flavor on food preference 339

VIRGINIA H. FEDER, GEORGE T. LEWIS AND HERBERT S. ALDEN. Studies on the urinary excretion of riboflavin. One figure 347

No. 5 MAY, 1944

DOUGLAS V. FROST AND F. PEIRCE DANN. Unidentified factor(s) in yeast and liver essential to cure of achromotrichia in dogs on synthetic diets. Two figures 355

SYLVIA COVER, BARBARA A. MCLAREN AND P. B. PEARSON. Retention of the B-vitamins in rare and well-done beef 363

H. R. BIRD. Comparison of response of turkey poults and of chicks to different forms of vitamin D 377

K. A. KUIKEN, R. H. MCCOY, M. O. SCHULTZE AND C. G. KING. Simplified diets for the guinea pig 385

RALPH J. SHAW AND HARRY J. DEUEL, JR. Studies on the absorption of carotene. One figure 395

ROBERT V. BOUCHER. Efficacy of vitamin D from different sources for turkeys. Two figures 403

A. Z. HODSON. The pyridoxine content of fresh, pasteurized, evaporated, and dried milk 415

B. S. SCHWEIGERT, J. M. MCINTIRE AND C. A. ELVEHJEM. The retention of vitamins in pork hams during curing 419

ROBERT H. SILBER. Studies of pantothenic acid deficiency in dogs. Three figures 425

No. 6 JUNE, 1944

HELEN OLDHAM, FRANCES JOHNSTON, SARAH KLEIGER AND HERNAN HEDERICH-ARISMENDI. A study of the riboflavin and thiamine requirements of children of preschool age. Two figures 435

BARNETT SURE. Vitamin interrelationships. III. Influence of sub-optimum doses of thiamine on urinary excretions of riboflavin 447

E. B. Forbes and R. W. Swift. With the technical collaboration of Ann Greenwood Buckman, Jane E. Schopfer and Mary T. Davenport. Associative dynamic effects of protein, carbohydrate and fat. Two figures 453

Gladys A. Emerson and Herbert M. Evans. The bioassay of vitamin E. One figure 469

Josef Warkany and Elizabeth Schraffenberger. Congenital malformations induced in rats by maternal nutritional deficiency. VI. The preventive factor 477

Ancell Keys, Austin Henschel, Henry Longstreet Taylor, Olaf Mickelsen and Josef Brozek. Absence of rapid deterioration in men doing hard physical work on a restricted intake of vitamins of the B complex 485

G. C. Pitts, F. C. Consolazio and R. E. Johnson. With the technical assistance of J. Poulin, A. Razoyk and J. Stachelek. Dietary protein and physical fitness in temperate and hot environments 497

Harry J. Deuel, Jr., Eli Movitt and Lois F. Hallman. With the technical assistance of Evelyn Brown. Studies on the comparative nutritive value of fats. IV. The negative effect of different fats on fertility and lactation in the rat 509